REMARKS

I. Status Summary

Claims 1-134 were filed with the application. Claims 1-134 have been previously cancelled and claims 135-157 added. Claims 140, 147, and 154 have previously been cancelled. Thus, claims 135-139, 142-146, 148-153, and 155-157 are pending and have been examined by the U.S. Patent and Trademark Office (hereinafter "the Patent Office"). Claims 135-139, 142-146, 148-153, and 155-157 presently stand rejected.

Claims 135-139, 142-146, 148-153, and 155-157 have been rejected under 35 U.S.C. § 112, second paragraph, upon the contention that the claims are indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Claims 135-139, 142-146, 148-153, and 155-157 have been rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1, 2 and 6 of U.S. Patent No. 6,617,114 ("the '114 Patent") to Fowlkes *et al.* Claims 135-139, 142-146, 148-153, and 155-157 have further been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 27-29, 32, 35, and 37 of copending U.S. Patent Application No. 10/346,162 ("the '162 Application).

Claim 135 has been amended herein. Support for the amendment can be found throughout the specification as filed, including particularly at page 37, lines 14-22; page 43, lines 8-29; and page 45, lines 28-35. No new matter has been added.

Reconsideration of the application as amended and based on the arguments set forth herein below is respectfully requested.

II. Response to the 35 U.S.C. § 112, Second Paragraph Indefiniteness Rejections of Claims 135-139, 142-146, 148-153, and 155-157

II.A. Response to the Rejection of Claim 136

Claim 136 presently stands rejected as allegedly being indefinite and unclear as to what constitutes a panel-based descriptor in the absence of positive definition or recitation in the specification. Particularly, the Patent Office asserts that the reference to a fingerprint for each member of said plurality of reference compounds is unclear in the context of the claim.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, applicants respectfully submit that the Patent Office's burden under 35 U.S.C. § 112, second paragraph, is to interpret the claims from the perspective of the skilled artisan in a manner consistent with the specification. *See* Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir. 2005). Furthermore, only when a claim term is "insolubly ambiguous" (*i.e.*, completely incapable of understanding) should it be deemed indefinite. *See* Marley Mouldings, Ltd. v. Mikron Industries, 417 F.3d 1356, 1361 (Fed.Cir. 2005), which held that when a claim "is not insolubly ambiguous, it is not invalid for indefiniteness." *See also* Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1371 (Fed.Cir. 2004) ("We have held that a claim is not indefinite merely because it poses a difficult issue of claim construction; if the claim is subject to construction, i.e., it is not insolubly ambiguous, it is not invalid for indefiniteness.").

Applicants respectfully submit that the reference to panel-based descriptors is not insolubly ambiguous when considered in view of the instant specification, and as such the instant rejection of claims 136 is improper.

Particularly, applicants respectfully submit that claim 136 as filed recites the method of claim 135, wherein said fingerprint for each member of said plurality of reference compounds comprises a plurality of panel-based descriptors, each panel-based descriptor characterizing the effect of said reference compound on the binding of a particularly panel member to said receptor. Contrary to the Patent Office's assertion, the specification does indeed sufficiently define "panel-based descriptor" such that one

of ordinary skill in the art would be ascertain the meaning thereof. Particularly, applicants point to page 46, lines 2-11, of the application as filed:

> For the purpose of the present invention, a plurality of descriptors must refer to the effect of the test substance on the binding of a member of the BioKey panel to a reference conformation, e.g., unliganded receptor X, receptor X/ligand A, receptor X/ligand B, unliganded receptor Y, receptor Y/ligand C, etc. Note that in this context, the term "member" may refer to a mixture of BioKeys of the same binding class. The descriptor may be qualitative (binds vs. nonbinds; increases vs. decreases vs. no effect, etc.) or quantitative. Preferably, at least 2-10 BioKey-based descriptors are used.

Applicants further point to page 46, line 31, through page 47, line 6, of the subject application:

> A "descriptor" (also known as a parameter, character, variable, or variate) is a numerically expressed characteristic of a compound (which may be a protein, or a protein ligand), which helps to distinguish that compound from others. A descriptor value need not be absolutely specific to a compound to be useful. The characteristics may be pure structural characteristics (as in a "structural descriptor") or they may refer to the compound's interaction with other compounds. "Paired Descriptors" are descriptors of the same property as measured in two different molecules. A "descriptor array", "list", or "set" is an array, list or set whose elements are different descriptors for the same molecule. Such an array, list or set is referred to herein as a "fingerprint".

Furthermore, applicants respectfully submit that the phrases at issue must be interpreted within the context of the claims in which they appear. For example, applicants respectfully submit that claim 135 recites contacting an estrogen receptor and a reference compound to form a reference conformation, contacting said reference conformation with a panel comprising a plurality of members, and measuring the effect of the reference compound on the binding of panel members to the receptor such that a fingerprint for reference compound is generated.

Applicants further submit that claim 136 recites that a fingerprint for each reference compound comprises a plurality of panel-based descriptors, each panel-based descriptor characterizing the effect of the reference compound on the binding of

a panel member to the estrogen receptor, such that each panel-based descriptor characterizes the effect of each reference compound on the binding of the panel members individually to the receptor. Thus, applicants respectfully submit that one of skill in the art would readily understand, after review of the instant specification, that the methods of the presently disclosed subject matter encompass measuring the effect of a reference compound on the binding of panel members to said receptor, wherein a fingerprint for each member of the reference compound is generated. Applicants respectfully submit that the specification teaches that such fingerprint is uniquely created for each reference compound using panel-based descriptors, which can be qualitative or quantitative.

Accordingly, applicants respectfully submit that one of ordinary skill in the art would understand what is intended by the term "panel-based descriptors" as used in claim 136. Since the specification discloses that a fingerprint can be created for each reference compound using panel-based descriptors, which can be qualitative or quantitative, it is clear that such fingerprint based on descriptors generated from panel binding could constitute "panel-based descriptors". Furthermore, applicants respectfully submit that the present specification provides adequate guidance such that one of ordinary skill in the art could determine the metes and bounds of "panel based descriptors" with reference to a fingerprint.

As a result, applicants respectfully submit that the terms "panel-based descriptors" and "fingerprint" are not insolubly ambiguous when considered from the perspective of one skilled in the art in a manner consistent with the specification. Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 136 has been addressed, and respectfully request that the instant rejection be withdrawn at this time.

II.B. Response to the Rejection of Claim 148

Claim 148 presently stands rejected as allegedly being indefinite for not providing the definition for "Xaa". Specifically, the Patent Office asserts that it is not clear whether "any amino acid" is a naturally occurring or synthetic amino acid.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, applicants respectfully point out that there is no requirement that claim terms must be specifically defined in the specification, particularly where, as here, the term adequately informs the skilled artisan of the metes and bounds of the claim. In response to the Patent Office's assertions, applicants respectfully submit that one of ordinary skill in the art would recognize that the term "amino acid" is known in the art to include natural amino acids and unnatural amino acids. Applicants further submit that the Patent Office has offered no reason to presume that the term "amino acid" is or must be limited to either natural or unnatural amino acids. Therefore, applicants respectfully submit that the Patent Office is attempting to read a limitation into the claim without any basis.

Accordingly, applicants respectfully submit that claim 148 meets the requirements of 35 U.S.C. § 112, second paragraph, with respect to the term "amino acid" and respectfully request that the Examiner's rejection of claim 148 be withdrawn at this time.

II.C. Response to the Rejection of Claim 135

The Patent Office has rejected claim 135, step (2)(c) as indefinite under the assertion that it is allegedly unclear whether the same panel members used in step 1(c) are used in step 2(c). In addition, the Patent Office asserts that the essentiality of step (2) of providing a test compound is unclear.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Applicants respectfully submit that the phrase at issue is not insolubly ambiguous when considered in view of the instant specification and in view of the knowledge of one of ordinary skill in the art at the time the application was filed.

Initially, applicants respectfully submit that step 2(c) of claim 135 recites "contacting said test conformation with said panel". Applicants submit that the terms "said panel" used in step 2(c) of claim 135 would be readily understood by one of skill in the art to indicate that the object preceding the term "said" has previously been identified. Thus, in step 2(c), applicants respectfully submit that "said panel" refers to the panel that has previously been identified in step 1(c). Thus, because the term "panel" has been introduced in step 1(c), applicants respectfully submit that it would be readily apparent to one of skill in the art that "said panel" recited in step 2(c) references the panel identified in step 1(c).

The Patent Office has additionally rejected claim 135 upon the contention that the essentiality of step (2) of providing a test compound is unclear. Particularly, the Patent Office suggests that it is unclear whether the test compound is different from the reference compounds that bind the estrogen receptor.

In response, applicants respectfully submit that one of ordinary skill in the art would readily understand the difference between a "test" compound and a "reference" compound. Clearly, after reading the specification, it would be generally understood by one of skill in the art that a reference compound is a compound used to gain a standard reading from the panel members of a known association with the estrogen receptor, while a test compound is a compound that possesses an unknown association with the estrogen receptor. Further, applicants respectfully submit that it would be readily apparent to one of skill in the art after a review of the instant disclosure, that the reference compounds are used to generate a known response to the panel members, such that the receptor-modulating activity of a test compound when bound to an estrogen receptor can be predicted. Applicants point the Patent Office to pages 45-46 (entitled "Reference Substances") and page 46-47 (entitled "'Fingerprinting' of Test and Reference Substances") of the specification for support.

Accordingly, applicants respectfully submit that the 35 U.S.C. §112, second paragraph, rejection of claim 135 has been addressed, and request that the instant rejection be withdrawn at this time.

II.D. Response to the Rejection of Claims 137-138

Claims 137-138 presently stand rejected as indefinite as allegedly being unclear as to the steps of obtaining panel members as specifically recited in base claim 135 from the broad component of claim 137.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, as noted hereinabove, applicants respectfully submit that the Patent Office's burden under 35 U.S.C. § 112, second paragraph, is to interpret the claims from the perspective of the skilled artisan in a manner consistent with the specification, and only when a claim term is "insolubly ambiguous" (*i.e.*, completely incapable of understanding) should it be deemed indefinite. Applicants respectfully submit that the claims at issue are not insolubly ambiguous when considered in view of the instant specification and in view of the knowledge of one of ordinary skill in the art at the time the application was filed.

Step 1(c) of claim 135 recites providing a panel comprising a plurality of members selected from the group consisting of ERα/βI, ERα/βII, ERα/βIII, ERα/βIV, ERαI, ERαII, ERαIII, ER βI, ERβII, ERβIII. Claims 137-138 respectively recite one method of obtaining the referenced panel members. Particularly, claims 137-138 recite, *inter alia*, that panel members are obtained by providing a ligand for the receptor, screening a combinatorial library for the ability to bind to the receptor, and selecting a panel based on the screening.

However, in an effort to clarify the scope of claims 137-138, applicants respectfully submit that claim 137 has been amended herein to recite, *inter alia*, screening a first combinatorial library comprising a plurality of members for the ability to

bind to "the receptor" instead of "a receptor". Accordingly, applicants respectfully submit that one of ordinary skill in the art would understand that "the receptor" as used in claims 137-138 refers to the estrogen receptor, as recited in claim 135.

Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claims 137-138 has been addressed, and request that the instant rejection be withdrawn at this time.

II.E. Response to the Rejection of Claim 139

Claim 139 has been rejected as indefinite as allegedly being unclear in predicting a test compound in a plurality of different tissues. Specifically, the Patent Office asserts that base claim 135 from which claim 139 depends does not recite predicting the biological effect in a plurality of different tissues.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, applicants note that the Court of Appeals for the Federal Circuit has repeatedly stated that absolute precision is not required to adequately define the metes and bounds of the claims of a patent application. "Section 112, ¶2, requires only reasonable precision in delineating the bounds of the claimed invention." U.S. v. Telectronics, Inc., 8 U.S.P.Q.2d 1217, 1223 (Fed. Cir. 1988), cert. denied, 490 U.S. 1046 (1989) (citation omitted) (emphasis added). The Court of Appeals for the Federal Circuit has also clarified the test for the definiteness of a claim: "[t]he test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more." Miles Laboratories, Inc. v. Shandon, Inc., 27 U.S.P.Q.2d 1123, 1126 (Fed Cir. 1993), cert. denied 510 U.S. 1100 (1994) (citations omitted).

Applicants respectfully submit that one of ordinary skill in the related art would understand that claim 135 encompasses a plurality of tissues within step 1(a).

Particularly, by the phrase "providing an estrogen receptor", it would be generally known to one of skill in the art that estrogen receptors promote biological activity in a wide variety of tissues. Applicants thus submit that one of ordinary skill in the art would understand that the step of predicting the receptor-modulating activity of a test compound when bound to an estrogen receptor, whereby the biological activity of the test compound in a plurality of tissues is predicted can refer to the prediction in a variety of tissues. For example, at page 6, lines 6, through page 7, line 4, the instant application recites that: (references omitted):

> Building on this complexity was the recent discovery of a second estrogen receptor, ERβ, whose mechanism of action appears to be similar, yet distinct from ERα...Thus, there are two forms of this receptor, α and β, presently known; other forms may exist. Both receptors activate transcription in response to estrogens, which are an important group of steroid hormones that not only influence the growth, differentiation, and functioning of the reproductive system, but also exert effects in the bone, brain and cardiovascular system. Estrogens can produce a broad range of effects in this diverse set of target tissues...For example, tamoxifen is an ER antagonist in breast tissue, but an ER agonist in bone and uterine tissue. Raloxifene is also an ER antagonist in breast tissue; however, it exerts agonist activity in bone but not uterine tissue. Indeed, one of the greatest challenges in understanding the pharmacology of the estrogen receptor is determining how different ER ligands produce such diverse biological effects.

Thus, applicants respectfully submit that, upon a reading of base claim 135, it would be readily understood by one of ordinary skill in the art that estrogen receptors have a role in a variety of different tissues. Thus, applicants submit that it would be readily understood by one of ordinary skill in the art that predicting the receptor-modulating activity of a test compound when bound to an estrogen receptor could encompass predicting the biological effect of the compound in a variety of different tissues. As such, applicants respectfully submit that claim 139, which depends from claim 135, is not indefinite.

Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 139 has been addressed, and request that the instant rejection be withdrawn at this time.

II.F. Response to the Rejection of Claim 152

Claim 152 presently stands rejected as indefinite as allegedly being unclear as to the unliganded ER because claim 135 from which claim 152 depends does not recite said term.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

While applicants do not necessarily agree with the Patent Office's characterization of claim 152 as indefinite, applicants have amended claim 152 in an effort to expedite prosecution of the pending claims. In particular, applicants respectfully submit that step 1(b) of claim 135 has been amended herein to recite, *inter alia*, "optionally contacting said estrogen receptor with a plurality of reference compounds, said reference compounds known to modulate the biological activity of said estrogen receptor, and wherein the unliganded estrogen receptor or the binding of each reference compound to said estrogen receptor forms a reference conformation...". Support for the amendment to claim 135 can be found throughout the specification as filed, including particularly at page 37, lines 14-22; page 43, lines 8-29; and page 45, lines 28-35. No new matter has been added.

Thus, applicants respectfully submit that, as amended, claim 135 provides the appropriate antecedent basis for the term "unliganded ER". Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 152 has been addressed, and request that the instant rejection be withdrawn at this time.

II.G. Response to the Rejection of Claim 153

Claim 153 has been rejected as indefinite for allegedly being unclear as to the reference conformations being selected from the unliganded receptor. Particularly, the Patent Office asserts that it is unclear from claim 153 whether step 1(b) of claim 135 contains a bound reference compound and estrogen receptor.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Applicants respectfully submit that, as recited hereinabove, step 1(b) of claim 135 has been amended herein to recite, *inter alia*, "optionally contacting said estrogen receptor with a plurality of reference compounds, said reference compounds known to modulate the biological activity of said estrogen receptor, and wherein the unliganded estrogen receptor or the binding of each reference compound to said estrogen receptor forms a reference conformation...". As such, applicants respsectfully submit that the asserted indefiniteness as to whether step 1(b) of claim 135 contains a bound reference compound has been clarified.

Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 153 has been addressed, and request that the instant rejection be withdrawn at this time.

II.H. Response to the Rejection of Claim 155

Claim 155 has been rejected as indefinite for allegedly being unclear as to the method by which 4-OH tamoxifen, nafoxidene, clomiphene, and raloxifene are distinguished from each another.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, applicants respectfully submit that it would be readily understood by one of ordinary skill in the art after a reading of the present disclosure how to distinguish the cited compounds from each other. Particularly, applicants point to page 140, lines 3-29 of the specification, which recite:

> The fingerprint assay, however, clearly indicates, that unique peptide binding surfaces are exposed on both ERα and β in the presence of 4-OH tamoxifen that are not exposed in the presence of ICI 182,780. Tamoxifen, nafoxidine and clomiphene contain the same triphenylethylene core structure. These

> three compounds, although similar in structure, produce distinct biological effects. Therefore, it might be predicted that these compounds would induce similar, yet distinct, conformational changes in the receptors. The fingerprint assay shows that the probes α/β III, IV and V, which have high affinity for the ER in the presence of 4-OH tamoxifen, have lower affinity for the ER complexed with nafoxidine and clomiphene, indicating that these peptide binding surfaces differ in the presence of these compounds. The α III probe more clearly differentiates these three compounds. The fingerprint assay also differentiates 4-OH tamoxifen and raloxifene. The probes α/β III, IV and V have reduced affinity for both ERα and β in the presence of raloxifene compared to 4-OH tamoxifen. The probes α/β II, β I and β III further distinguish ER β conformational changes induced by these two compounds. The fingerprint pattern produced by Premarin is distinct compared to other agonists; however, Premarin's activities are due to a mixture of components. It would be interesting to assess the binding patterns of the probes in the presence of each of the purified, activated components of Premarin.

Applicants further point to page 141, lines 3-20 of the specification, which recite:

> The probes α/β III-V show enhanced binding in the presence of SERMs, particularly 4-OH tamoxifen, indicating that a new binding surface is exposed on the ER in the presence of these compounds. The binding patterns of these three probes along with the probes α/β II, α III, β I and β III illustrate differences in the receptor conformation induced by 4-OH tamoxifen, nafoxidine, clomiphene, and raloxifene. Since the binding of the probes to the ER in the presence of these SERMs may be altered but not abrogated, subtle changes in receptor conformation can be visualized. **This is the first *in vitro* assay that distinguishes between these four compounds.** The probe α II is also unique in that it binds to ER α in the presence of any compound that binds to the estrogen receptor, indicating that while some receptor conformational changes are unique to the modulator, others may be more universal. Overall, these probes allow the detection of both subtle and distinct conformational changes that are induced by many different modulators of ER activity.

Applicants respectfully submit that, after a reading of the specification, one of ordinary skill in the art, would understand that the instantly claimed methods can distinguish 4-OH tamoxifen, nafoxidene, clomiphene, and raloxifene from one another. The presently claimed methods can detect that the binding of each compound to the estrogen receptor induces a conformational change that exposes unique peptide binding surfaces that are not exposed in the presence of other compounds.

Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 155 has been addressed, and request that the instant rejection be withdrawn at this time.

III. Response to the Rejection of Claim 157

Claim 157 has been rejected as indefinite for allegedly being confusing in reference to Table 10 peptide. Particularly, the Patent Office asserts that Table 10 recites for no modulator, and it is unclear whether all the peptides or selected peptides are intended.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

As discussed hereinabove in more detail, applicants submit that claim 135 has been amended herein to recite, *inter alia*, the step of providing an estrogen receptor and optionally contacting the estrogen receptor with a plurality of reference compounds known to modulate the biological activity of the estrogen receptor. Accordingly, claim 135 as amended recites that modulator optionally can be bound to the estrogen receptor prior to contact with the panel. As such, applicants respectfully submit that the asserted indefiniteness with regard to claim 157 has been addressed. Particularly, applicants respectfully submit that any of the peptides in Table 10 are intended, including those peptides where no modulator was used.

Accordingly, applicants contend that the 35 U.S.C. §112, second paragraph, rejection of claim 157 has been addressed, and request that the instant rejection be withdrawn at this time.

IV. Response to the Obviousness-Type Double Patenting Rejections

IV.A. Response to the Rejection of Claims 135-139, 142-146, 148-153, and 155-157 in View of the '114 Patent

Claims 135-139, 142-146, 148-153, and 155-157 presently stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 6 of the '114 Patent.

The rejection is respectfully traversed. Applicants respectfully submit that the specific recitation of the method of predicting the receptor-modulating activity of a test compound when bound to a receptor as recited in claims 135-139, 142-146, 148-153, and 155-157 of the subject application is not disclosed in claims 1, 2, and 6 of the '114 Patent. Rather, claims 1, 2, and 6 of the '114 Patent are directed to a method of identifying a ligand that can mediate the biological activity of a target protein.

To elaborate, applicants respectfully submit that claims 135-139, 142-146, 148-153, and 155-157 recite that the receptor-mediated activity of a test compound bound to a receptor can be predicted by using a panel to obtain a fingerprint corresponding to how the test compound interacts with the receptor in its various panel-modified conformations. The similarity of the fingerprint of the test compound to the fingerprint of a reference compound of known biological activity can then be calculated and used to predict the bioactivity of the test compound. This feature, namely, predicting the receptor-modulating activity of a test compound when bound to a receptor, is believed to patentably distinguish current claims 135-139, 142-146, 148-153, and 155-157.

Claims 1, 2, and 6 of the '114 Patent, on the other hand, appear to recite the use of competitive inhibition to identify ligands that inhibit the binding of a target protein to a bound partner ligand. Particularly, a first library comprising a plurality of ligands is screened to identify one or more ligands that bind a target protein, and a second library comprising a plurality of ligands is then screened for the ability to inhibit the binding of the first target-binding ligands.

Accordingly, applicants respectfully request that the obviousness-type double patenting rejection of claims 135-139, 142-146, 148-153, and 155-157 over claims 1, 2, and 6 of the '114 Patent be withdrawn at this time.

IV.B. Response to the Rejection of Claims 135-139, 142-146, 148-153, and 155-157 in View of the '162 Application

Claims 135-139, 142-146, 148-153, and 155-157 presently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-29, 32, 35, and 37 of the '162 Application.

After careful consideration of the instant rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

It is noted that according to the Patent Office's Public PAIR service, the '162 Application was abandoned due to failure to respond to an Official Action. Particularly, a Notice of Abandonment for the '162 Application was mailed August 25, 2006. The abandonment of the '162 Application is believed to render the instant rejection moot.

Accordingly, applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 135-139, 142-146, 148-153, and 155-157 over claims 27-29, 32, 35, and 37 of the '162 Application be withdrawn at this time.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early Notice of Allowance to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above amendments and remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

Any fees or credits due with this response may be charged to Deposit Account 23-1665.

Respectfully submitted,

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